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Chemical recycling of complex plastics

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There are too many plastics that we currently burn and do not make the most of. This can be prevented by keeping plastics in the value chain as long as possible, and thus reducing the use of fossil oil for plastic production. TNO achieves this by designing plastics that can be used for longer and which can be easier maintained an recycled and to develop chemical recycling technologies for complex plastics.

Although more simple plastics can be easily mechanically recycled, this is not possible for more complex plastics. For these complex plastics often chemical recycling need to be applied. TNO has broad experience in reclaiming polymers through chemical recycling technologies. In this lecture Marinke shares experience on gasification, pyrolysis and dissolution of plastics.